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Patent Application Attorney Docket No.: 57983.000037 Client Reference No.: 13527RO

## ABSTRACT OF THE DISCLOSURE

A technique for providing user domain constrained optical route flooding for multiple optical networking service modes is disclosed. In one embodiment, the technique is realized by a method for routing information over an optical network having multiple optical service models. The method comprises receiving a link state advertisement including an incoming optical interface descriptor at an optical switch, checking an outgoing optical interface descriptor for an outgoing link; flooding the link state advertisement over the outgoing link if the outgoing optical interface descriptor has a first predefined value, blocking the link state advertisement if the outgoing optical interface descriptor has a second predefined value, and comparing the ingoing and outgoing optical interface descriptors if the outgoing optical interface descriptor has neither the first pre-defined value nor the second predefined value and flooding the link state advertisement only if the incoming user group identifier matches the outgoing optical interface descriptor.